



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.

09/801,250 :

Applicant

Jorgen Johansson

Filed

March 7, 2001

Title

"DEVICE IN A PORTABLE POWER TOOL"

Conf. No.

4992

TC/AU

3724

Examiner

Clark F. Dexter

Customer No.

000,116

Docket No.

33208

Mail Stop Appeal Brief Patents Commissioner for Patents P.O. Box 1450

Alexandria, VA 22313-1450

TECHNOLOGY CENTER RS TO

APPEAL BRIEF

. Dear Sir:

Applicant submits this brief in triplicate in connection with an appeal of the aboveidentified application. A check in the amount of \$330.00 is enclosed herewith for the fee associated with this brief.

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Mail Stop Appeal Brief Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated be-

> Una L. Schumacher Name of Attorney for Applicant(s)

April 23, 2004

Date

Signature of Attorney

Real Party in Interest (37 C.F.R. §1.192(c)(1))

The real party in interest in the present appeal is AKTIEBOLAGET ELECTROLUX, the assignee of the present application.

Related Appeals and Interferences (37 C.F.R. §1.192(c)(2))

Appellant, appellant's legal representatives, and/or the assignee of the present application are unaware of any appeals or interferences that will directly affect, or be directly affected by or have a bearing on the Board's decision in the pending appeal.

Status of Claims (37 C.F.R. §1.192(c)(3))

Claims 1 through 7 are pending in the application. Claims 1-6 stand rejected under 35 U.S.C. §103(a). The rejection of claims 1-6 is appealed. It does not appear that the Examiner ever considered claim 7, which was added to the application prior to the final rejection of September 25, 2003.

Status of Amendments (37 C.F.R. §1.192(c)(4))

No claim amendments have been made subsequent to the final rejection of September 25, 2003.

Summary of Invention (37 C.F.R. §1.192(c)(5))

The present invention relates to locking assembly for a handheld power tool for holding a rotatable shaft in a fixed position during installation and removal of a blade. The handheld power tool includes a housing 10 having an engine powered gearbox. Pg. 4, l. 4. The gearbox includes a toothed transmission gear with a rotatably drive shaft 11. At a low end of the shaft 11,

a fastening device 12 is attached for holding a cutting tool 13 in place. Pg. 5, ll. 1-4. A vertical hole 16 is located on one side of the gearbox housing 10. Inside the hole 16, a locking pin 17, which can be made of a magnetic material, is inserted. The lower end of the locking pin 17 is inserted in a corresponding hole 18 in the fastening device 12. The housing wall surrounding hole 16 includes a magnet 19 to magnetically engage and be in contact with the locking pin 17. Pg. 5, ll. 10-19. When the locking pin 17 is inserted into the corresponding hole 18 in the fastening device 12, the cutting tool 13 and the drive shaft 11 are locked and unable to rotate. Pg. 6, ll. 3-6.

Issues (37 C.F.R. §1.192(c)(6))

- I. Whether claims 1-6 are unpatentable under 35 U.S.C. 103(a) over Bugbee (U.S. Patent No. 146,648), in view of Corona et al. (U.S. Patent No. 4,463,788), or Cassada et al. (U.S. Patent No. 5,271,253).
 - II. Whether the finality of the Office action dated September 25, 2003 was premature.

Grouping of Claims (37 C.F.R. §1.192(c)(7))

Claims 1-7 are grouped as follows: Claims 1-6 stand or fall together and Claim 7 stands or falls alone.

Argument (37 C.F.R. §1.192(c)(8))

I. Claims 1-6 are Patentable over Bugbee (U.S. Patent No. 146,648), in view of Corona et al. (U.S. Patent No. 4,463,788), or Cassada et al. (U.S. Patent No. 5,271,253).

Claims 1-6 were rejected under 35 U.S.C. §103(a) as being unpatentable over Bugbee (U.S. Patent No. 146,648) (hereinafter "Bugbee"), in view of Corona et al. (U.S. Patent No.

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4,463,788) (hereinafter "Corona"), or Cassada et al. (U.S. Patent No. 5,271,253 (hereinafter "Cassada"). The Examiner's rejection is improper for at least the following reasons:

A. The References, Even If Combined, Do Not Teach or Suggest "a magnet carried by the housing at a distance from the rotatable cutting tool that permits magnetic communication between the magnet and the locking pin when the locking pin is in the locking position, wherein the magnetic communication between the magnet and the locking pin retains the locking pin in its locking position to facilitate removal and installation of the cutting tool on the shaft", as recited in independent claim 1.

Bugbee in view of Corona

Neither Bugbee nor Corona, individually or in combination, teach or suggest a magnet carried by a housing at a distance from a rotatable cutting tool such that magnetic communication between the magnet and a locking pin retains the locking pin in a locking position, as required by independent claims 1 and 6. In the final Office action dated September 25, 2003, the Examiner conceded that Bugbee lacks the claimed magnet. Accordingly, the Examiner took Official notice that "it is old and well known in the art to use one or more magnets, including neodymium magnets, to hold a metallic component in a desired position." The Corona patent was cited as an example in support of the Examiner's Official notice.

It is well known that,

determination of obviousness cannot be based on the hindsight combination of components selectively culled from the prior art to fit the parameters of the patented invention. There must be a teaching or suggestion within the prior art, within the nature of the problem to be solved, or within the general knowledge of a person of ordinary skill in the field of the invention, to look to particular sources, to select particular elements, and to combine them as combined by the inventor. When the patented invention is made by combining known components to achieve a new system, the prior art must provide a suggestion or motivation to make such a combination. Crown Operations Int'l, LTD v. Solutia Inc., 289 F.3d 1367, 62 U.S.P.Q.2D (BNA) 1917 (Fed. Cir. 2002). (emphasis added).

Corona does disclose a magnet; however, Corona does not provide a suggestion or motivation to employ the magnet to retain a locking pin in a locking position. More specifically, Corona dis-

closes a multi-bit screwdriver having a magnet (96) secured to a base portion (82) of a U-shaped element to attract a bit end (48) toward a bore (66). Thus, the magnet (96) in Corona is employed to <u>move</u> the bit (16) for the screwdriver from a first position to a second position. The screwdriver bit (16) of Corona is not a locking pin; nor does the magnet (96) of Corona retain the bit (16) in a locking position. In fact, Corona discloses a separate locking device to retain the bit (16) in a locked position. See Col. 5, lines 66-68 of Corona.

Further, there is nothing in Bugbee that would have suggested the need to employ a magnet, or any other type of device, to retain pin (K) in a <u>locking</u> position. Bugbee only discloses the need for retaining pin (K) in an <u>unlocked</u> position. Specifically, Bugbee states, "when retracted, the pin K L is held from any interference with the collar by means of the handle L engaging behind the lower step I, as in Fig. 1..." There is nothing in Bugbee that discloses, teaches, or suggests retaining the pin (K) in engagement with the collar. Thus, one of ordinary skill in the art would not have been motivated by the multi-bit screwdriver of Corona to modify the saw mandrel of Bugbee to include a magnet for retaining pin (K) in engagement with the collar, as suggested by the Examiner.

For at least the aforementioned reasons, neither Bugbee nor Corona, individually or in combination, teach or suggest each and every limitation set forth in independent claims 1 and 6. Thus, reversal of this rejection is respectfully requested.

Bugbee in view of Cassada

Neither Bugbee nor Cassada, individually or in combination, teach or suggest a magnet carried by a housing at a distance from a rotatable cutting tool such that magnetic communication between the magnet and a locking pin retains the locking pin in a locking position, as required by independent claims 1 and 6. As discussed above, in the final Office action dated September 25, 2003, the Examiner conceded that Bugbee lacks the claimed magnet. The Examiner then took Official notice that "it is old and well known in the art to use one or more magnets, including neodymium magnets, to hold a metallic component in a desired position." The Cassada patent was cited as an additional example in support of the Examiner's Official notice.

Cassada, like Corona, does disclose a magnet; however, Cassada does not provide a suggestion or motivation to employ the magnet to *retain* a locking pin *in a locking position*. Specifically, Cassada discloses an electronic combination lock having a magnetic, anti-attack interlock. The anti-attack interlock includes a magnetic pin (34) *held in a <u>retracted position</u>* by a small magnet (46). Thus, the magnet of Cassada retains the pin in an <u>unlocked position</u>.

Further, there is nothing in Bugbee that would have suggested the need to employ a magnet, or any other type of device, to retain pin (K) in a <u>locking</u> position. Bugbee only discloses the need for retaining pin (K) in an <u>unlocked</u> position. Specifically, Bugbee states, "when retracted, the pin K L is held from any interference with the collar by means of the handle L engaging behind the lower step I, as in Fig. 1...." There is nothing in Bugbee that discloses, teaches, or suggests retaining the pin (K) in engagement with the collar. Thus, one of ordinary skill in the art would not have been motivated by the electronic combination lock of Cassada to modify the saw mandrel of Bugbee to include a magnet for retaining pin (K) in engagement with the collar, as suggested by the Examiner.

For at least the aforementioned reasons, neither Bugbee nor Cassada, individually or in combination, teach or suggest each and every limitation set forth in independent claims 1 and 6. Thus, reversal of this rejection is respectfully requested.

B. Examiner Has Failed To Support A Prima Facie Case Of Obviousness

The Examiner has not provided the proper motivation for combining the Bugbee reference with either the Corona or the Cassada references. Bugbee is directed to an expansible mandrel for circular saws; while Corona is directed to a multi-bit screwdriver having a handle with a bit selector cup rotatably mounted at its end; and Cassada is directed to a magnetic anti-attack interlock for an electronic combination lock. The burden is on the Examiner to make a prima facie case of obviousness (MPEP §2142). To support a prima facie case of obviousness, the Examiner must show that there is some suggestion or motivation to modify the reference(s) (MPEP §2143.01). The mere fact that references can be combined or modified, alone, is not sufficient to establish prima facie obviousness (Id.). The prior art must also suggest the desirability of the

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combination (Id.). The fact that the claimed invention is within the capabilities of one of ordinary skill in the art is not sufficient, by itself, to establish prima facie obviousness (Id.).

Moreover, the Examiner has not cited any proper motivation to modify the Bugbee reference. Bugbee does not disclose any desirably of holding pin (K) in a locking position. Conclusory statements of benefit are not sufficient to show obviousness. Merely listing an advantage of the combination is also not sufficient, as some rationale for combining the references must be found in the references, or drawn from a convincing line of reasoning based on established scientific principles that some advantage or beneficial result would be produced by the combination (MPEP §2144). Such motivation cannot be found in the application itself, as such hindsight is impermissible; the facts must be gleaned from the prior art. (MPEP §2142, last paragraph).

II. The Finality of the Office Action dated September 25, 2003 was Improper.

Claim 7, which was added to the present application on April 15, 2003, was never mentioned, nor its treatment or status given, by the Examiner during prosecution of the application. Thus, it appears the Examiner never considered the patentability of claim 7. In applicant's response to the final Office action dated September 25, 2003, applicant notified the Examiner of the defect and requested that the Examiner issue a supplemental action addressing claim 7. However, such action was never received. According to Section 707.07(i) of the MPEP:

In every office action, each pending claim should be mentioned by number, and its treatment or status given. Since a claim retains its original numeral throughout the prosecution of the application, its history through successive actions is thus easily traceable. Each action should conclude with a summary of all claims presented for examination. (emphasis added).

Thus, because it appears that claim 7 was never considered during prosecution, it is submitted that the finality of the Office action dated September 25, 2003 was improper.

Conclusion

For at least the reasons stated above, the applicant's claims represent a new, useful, nonobvious system and method for a locking assembly for a handheld power tool.

The Examiner has failed to establish a prima facie case of obviousness under 35 U.S.C. §103(a) for claims 1-6, because the prior art cited by the examiner, individually and in combination, fails to teach or suggest a magnet carried by a housing at a distance from a rotatable cutting tool such that magnetic communication between the magnet and a locking pin retains the locking pin in a locking position. Additionally, the Examiner has failed to provide the proper motivation for combining the references. Consequently, the rejection of claims 1-6 for obviousness by the examiner is not supported, and thus, such claims are patentable over the references.

Further, the finality of the rejection was premature as the Examiner failed to properly consider all of the pending claims, in particular, claim 7, in the present application.

For at least these reasons discussed herein, applicant respectfully requests the Board of Patent Appeals and Interferences to reverse the rejection of claims 1-6 and return the case to the examiner for issuance of a notice of allowability.

If there are any additional fees resulting from this communication, please charge all uncovered fees to our Deposit Account No. 16-0820, our Order No. 33208.

Respectfully submitted,

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Date: April 23, 2004

Appendix A

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- A portable, engine-powered hand tool comprising:

 a housing (10) with a rotatable shaft (11) releasably connected to a rotatable cutting tool

 (13);

 a locking pin (17) that is movable along its axis inside a hole (16) in the housing (10) to a
- locking position, wherein the locking pin interferes with the rotation of the shaft (11) to lock the shaft (11) in a non-rotating position when the locking pin is in the locking position; and a magnet (19) carried by the housing at a distance from the rotatable cutting tool that
- a magnet (19) carried by the housing at a distance from the rotatable cutting tool that permits magnetic communication between the magnet and the locking pin when the locking pin is in the locking position, wherein the magnetic communication between the magnet and the locking pin retains the locking pin (17) in its locking position to facilitate removal and installation of the cutting tool on the shaft.
- 2. A tool according to claim 1, wherein the locking pin (17) is made of a magnetic material and the magnet (19) is fastened to the housing (10).
 - 3. A tool according to claim 1, wherein the magnet (19) is a neodymium magnet.
- 4. A tool according to claim 1, wherein a fastening device (12) for the cutting tool is attached to the shaft (11) and is provided with an opening (18) with an axial centerline that is alignable with an axial centerline of the hole (16) in the housing, wherein the locking pin (17) can be inserted into the opening (18).
- 5. A tool according to claim 1, wherein the housing (10) is a gear box housing for a clearing saw and the cutting tool (13) is a circular saw blade.
- 6. In a portable, engine-powered, hand tool having a circular saw blade releasably fixed to an end of a rotatable shaft, the improvement comprising:
- a locking pin of magnetic material movable along its axis inside a hole (16) in the housing (10) from a non-locking position to a locking position that locks the rotatable shaft in a fixed position to facilitate installation and removal of the saw blade, the tool including a magnet carried by the housing at a distance from the rotatable cutting tool that permits magnetic communication between the magnet and the locking pin for holding the locking pin in its non-locking and locking positions.
- 7. A tool according to claim 1 wherein the magnet is positioned adjacent to and in communication with the hole.